The House of Faith – United Methodist Church of Yucaipa Sound Technician Training

Sound Board, Screen, and Computer Setup

1. Turn on the **Master Power switch** on the power strip under the right side of the sound booth. This is the ONLY power strip that gets turned on and off down there; all other power strips are connected to the Master Power strip.


2. Turn the **sound board** on from the switch on the back left side of the board. It's a toggle switch; the top of the switch goes in for ON (you will see lights on the board) and the bottom goes in for OFF.

3. Turn on the Roland video mixer from the button on the back (see ^ POWER). If more than one camera input is used, the slider handle in the middle switches between the video inputs.

4. Make sure the Main slider is all the way down on the sound board, and then turn on the **main speakers**. Each of the speakers has a toggle switch on the lower left side of the back. It's a toggle switch; the top of the switch goes in for ON (you will see a blue light on the front of the speaker) and the bottom goes in in for OFF.
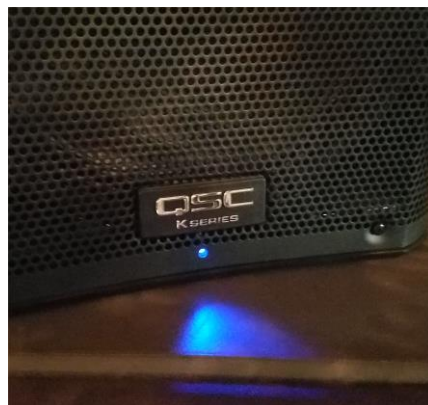
Note: the choir speakers are not being used currently. To turn on the **choir speakers**, you need to turn on the power for the Amplifier (above right) that is next to the speaker on the right (facing front). Turn on the toggle switch; you will see lights when it is on. Keep this amp turned so that the lights don't show to the congregation.

5. If the **projector** isn't on, get the remotes from the top of the organ. The remote (shown at right) is for the projector. Point the remote at the projector (organ side) on the ceiling and use the green button to turn it on. It will take a minute to start up, but you'll see the lights on the projector blink as it comes on and warms up.

   To turn off the projector after worship, use the same green button. The screen will show a prompt to push the green button a second time to confirm. Point the remote at the projector and press the green button again to turn it OFF.

6. The **monitors** on the wall behind the choir pews are turned on with the Vizio remote. Use the power button to turn the monitors on or off.

7. There is a small flatscreen monitor on the lectern. Push the power button on the lower right side to turn it on.
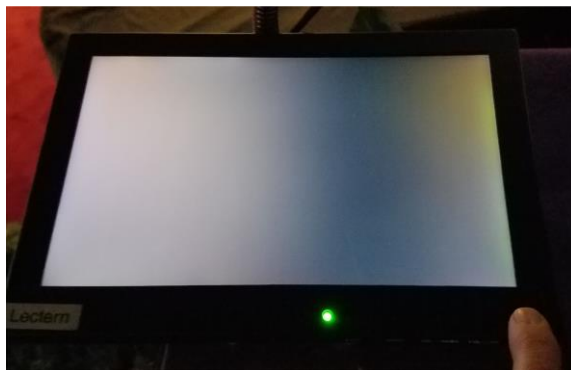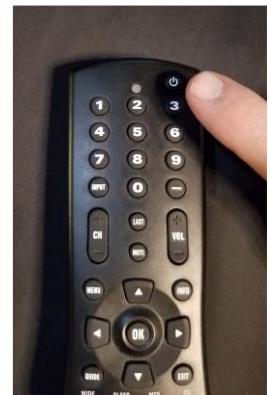
8. The left **screen** should be pulled all the way down; the right screen stays up. There is a pole with a hook that belongs on one of the small ledges behind the screens that can be used to pull them down. They will automatically roll up just like a roller-type window blind.

9. There are two laptops. Each one has a Bob login with no password. **The silver laptop is used to run Zoom. The red laptop is used to run Powerpoints,** which show on the screens and are shared for Zoom worshippers. Note: the administrator login for the silver laptop is **UMCY** pw beech, and the red laptop is **Deb** pw teiykou7. The TPLink wireless network passwords are also teiykou7.

10. To create a Sunday Zoom meeting, run Zoom on the silver laptop, click on the Zoom shortcut. It will open a Zoom session. If you need to Sign In, login as **sanctuary@yucaipamethodist.org** using password **Teiykou7**.   Click on Home from the top toolbar, and Schedule to create a scheduled Zoom meeting for Sunday worship.
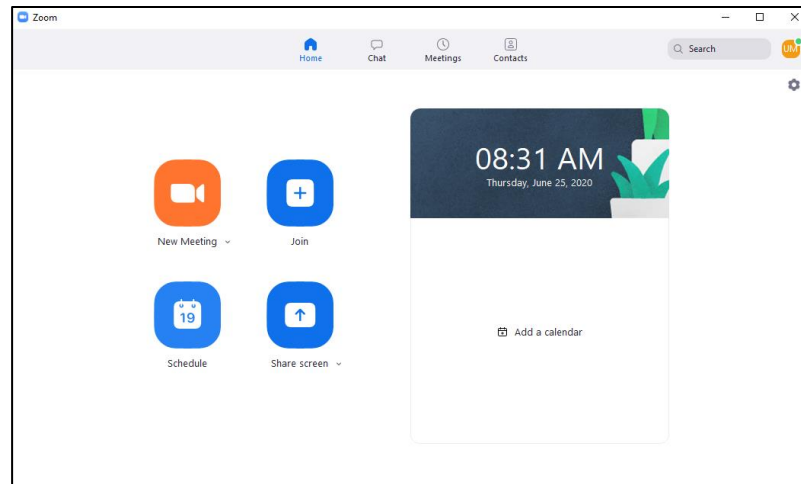
Choose the date and time (9:15 am start and 1:30 duration). Click on Advanced Options at the bottom (see below right) and make sure Mute Participants on Entry is checked.

To send out the meeting invitation, click on Meetings from the top menu bar in Zoom, and then click on Copy Invitation. Always use the personal meeting ID: 522 351 5439.
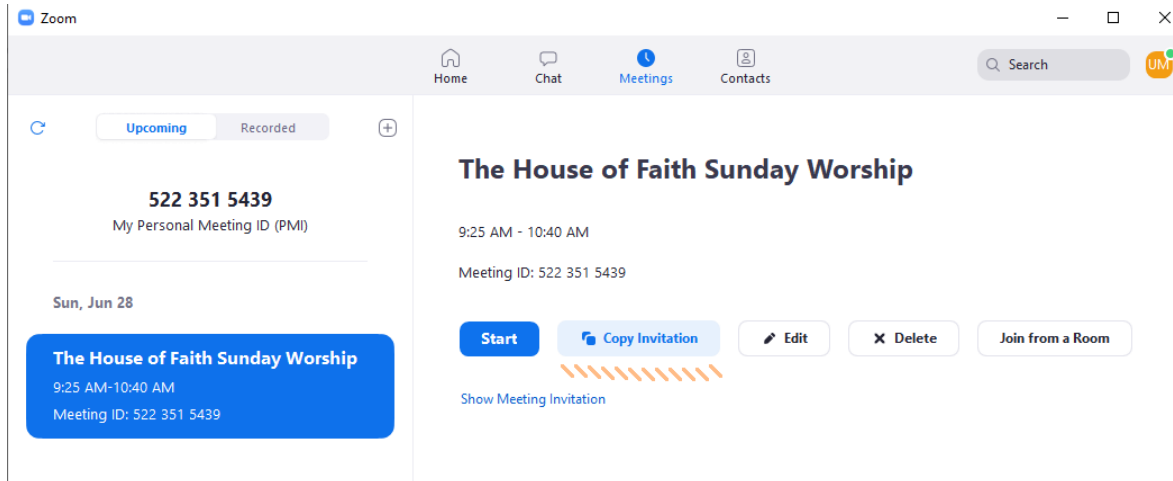
11. Go to Gmail and login as UMCOYHouseOfFaith@gmail.com. The password is Teiykou7. **Compose an email to UMCOYHouseOfFaith@gmail.com, and click bcc to blind copy the Local Church group.** Paste the invitation (Ctrl + V) into the body of the email and Send. **Sending with bcc protects the email addresses of the recipients.**

12. On Sunday mornings, after the main power is on, start the Sony video camera by opening the side viewer on the left. **Start the camera before you start the Silver Zoom session so that it will show the video**. Twist the handles on the tripod to release and turn the camera (up/down and left/right). The tripod can also be adjusted up/down.

13. The ring behind the lens is used to Zoom and Focus. There is a slider switch right next to the ring. Push it up to Zoom, or down to Focus (it will autofocus). Move the camera and zoom slowly, or it is very disorienting for the viewer. **There is also a button on the right top side of the camera that zooms in/out that is easier to access.**

14. After the camera is on, start Zoom from the silver laptop. Choose Meetings from the top menu bar, choose the Sunday Worship meeting, and click on Start. **Join with Computer Audio**. The video feed will automatically display in the window and be shared. Start the meeting at about 9:00 am so there is time to test the sound.

15. At the bottom of the Zoom screen, click on Participants to open the participant list on the right side of the screen. As the host, United Methodist Church will always be at the top. The list of users underneath will have a microphone (crossed out if muted) and a video camera if they have enabled video.
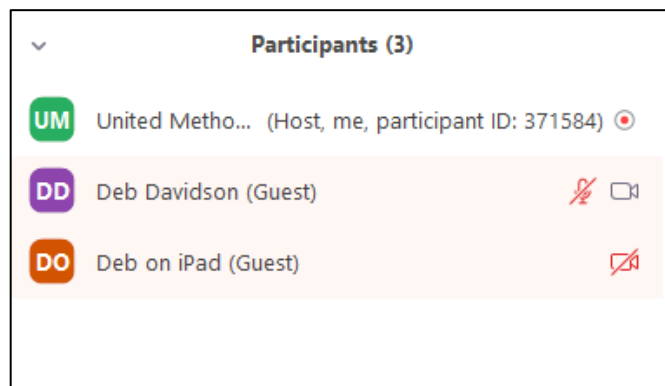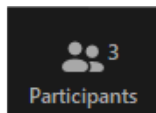
16. At the bottom of the Participants section are Mute All and Unmute All buttons. Everyone should start muted, but to prevent unmuting, click on Mute All and uncheck the box for Allow Participants to Unmute Themselves, as shown below. Then click Yes. This will disallow participants from Unmuting their microphones until it is changed.
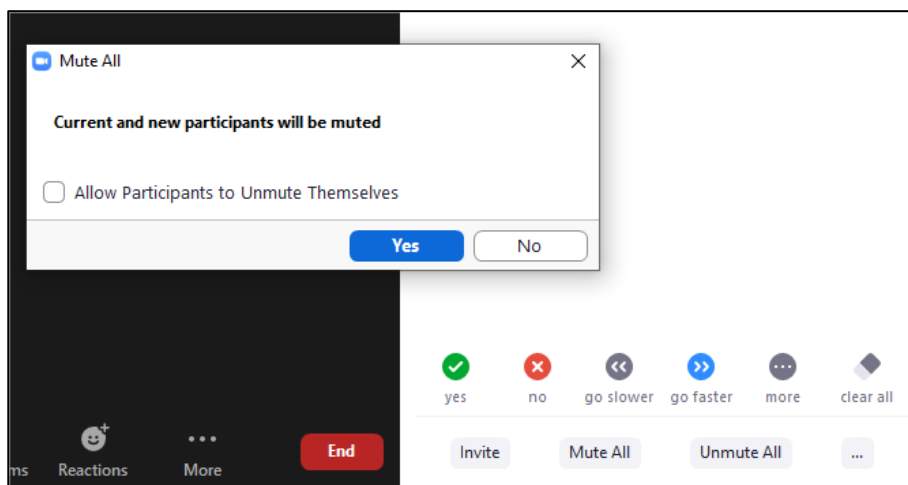
17. The Red laptop should be started, but it may already be running the powerpoint announcements. If so, use the Esc key to exit the current powerpoint show. To join the Zoom session as the co-host, open yucaipamethodist.org in a browser and click on the Worship link. You can also run Zoom and choose Join to connect to the Zoom session. Do not start the Zoom session if prompted. The Red Zoom session should be run WITHOUT COMPUTER AUDIO… sound from the Powerpoints will go through the black microphone cable into the soundboard. Turn off the video from the Red Zoom and rename the session Red Zoom. Show Zoom full screen for the best video screen display.

18. Once the Red Zoom session is connected, start the worship powerpoint slideshow. It will be run full screen, but you can use ALT+Tab to switch between open applications and see the Zoom session. When 3 participants are on, Spotlight the Silver Zoom session, and make Red Zoom the Co-host.

19. When running the powerpoints, use the mouse scroll wheel or left mouse click to advance to the next slide. The slides are printed and have a number. Typing in the number and pressing Enter will go to that slide.

20. From the Zoom session, choose Share and then select the Powerpoint show and OK. The powerpoints will display for the Zoom participants. When you stop the Share, the camera video will be shown. **Show video for Prelude, Announcements, Sermon and Special Music**, and share the Powerpoints when participants need to read the call to Worship, scripture, hymn words, Young at Heart Moments, etc. **NOTE: Alt+Tab is only used to get to another application. When you want to show the powerpoints for the congregation, you muse SHARE the powerpoints that are running. If you just switch with Alt+Tab, the congregation will see it, but the Zoom participants do not. Zoom sees what is on the Silver Zoom computer screen.**

21. **At the last verse of the 2nd hymn (to prepare for Passing of the Peace and Joys and Concerns),** click on the Unmute All button at the bottom of the Participants section for Fellowship Time. This will let Zoom participants unmute to share with the Sanctuary.

22. On the Red Zoom computer, change from Speaker View to Gallery View so the congregation can see who is on Zoom. **Use Stick 1 with a Clorox wipe to get Joys and Concerns from the congregation.** If anyone on Zoom has something to share, put the stick mic 1 up to the Silver computer speaker so everyone can hear. After Joys and Concerns, switch back to Speaker view, and then share the powerpoints and go to the Unison Prayer.

23. Check Stick 1 **microphone** before the service to make sure there is a green light. Stick 1 is kept in the sound booth drawer for Joys and Concerns. Press and hold the button on the side of the wireless mic to turn it on. If the light is green, the batteries are good. If red, change the batteries. When the light is green, a quick push will mute the mic, and another quick push will un-mute it. Push and hold to turn off the mic.

24. The liturgist microphone is wired and does not have a switch or batteries.

25. Pastor Phillips' microphone is kept up on his lectern. There is a power strip on the floor up there that powers the transmitter for his microphone, and that has to be on during worship. The Countryman mic hooks over the ear and lays against the cheek toward the mouth. THIS MICROPHONE IS FRAGILE! The audio wire is also thin and fragile, and to make everything last as long as possible, don't connect / disconnect the mic from the transceiver, and make sure everything is tucked inside the foam when you put it away. Push the button and and check for a green light; if it's red, change the batteries. When the light is green, a quick push will mute the mic, and another quick push will un-mute it. Push and hold to turn off the mic. Phillips usually takes care of that, but you may need to if we have a guest preacher.

26. If you need to change the batteries, there are new AA batteries in the second drawer in the soundbooth, and the old batteries go in the metal tin in the first drawer. To open the battery compartment of the stick mics, unscrew the bottom of the microphone case and squeeze the latch to access the batteries. Make sure to note the positive and negative directions before you replace them.

    The wireless transmitter battery compartments just pull open on the bottom. There is a ribbon that lays underneath that can be used to pop them out. Lay the ribbon back underneath before you put in the new batteries.

Running the Sound Board

27. Our soundboard has 24 channels. Some are stereo, which means that there is a L and R input (e.g., the stereo CD player) and other are mono (e.g., single microphone inputs)
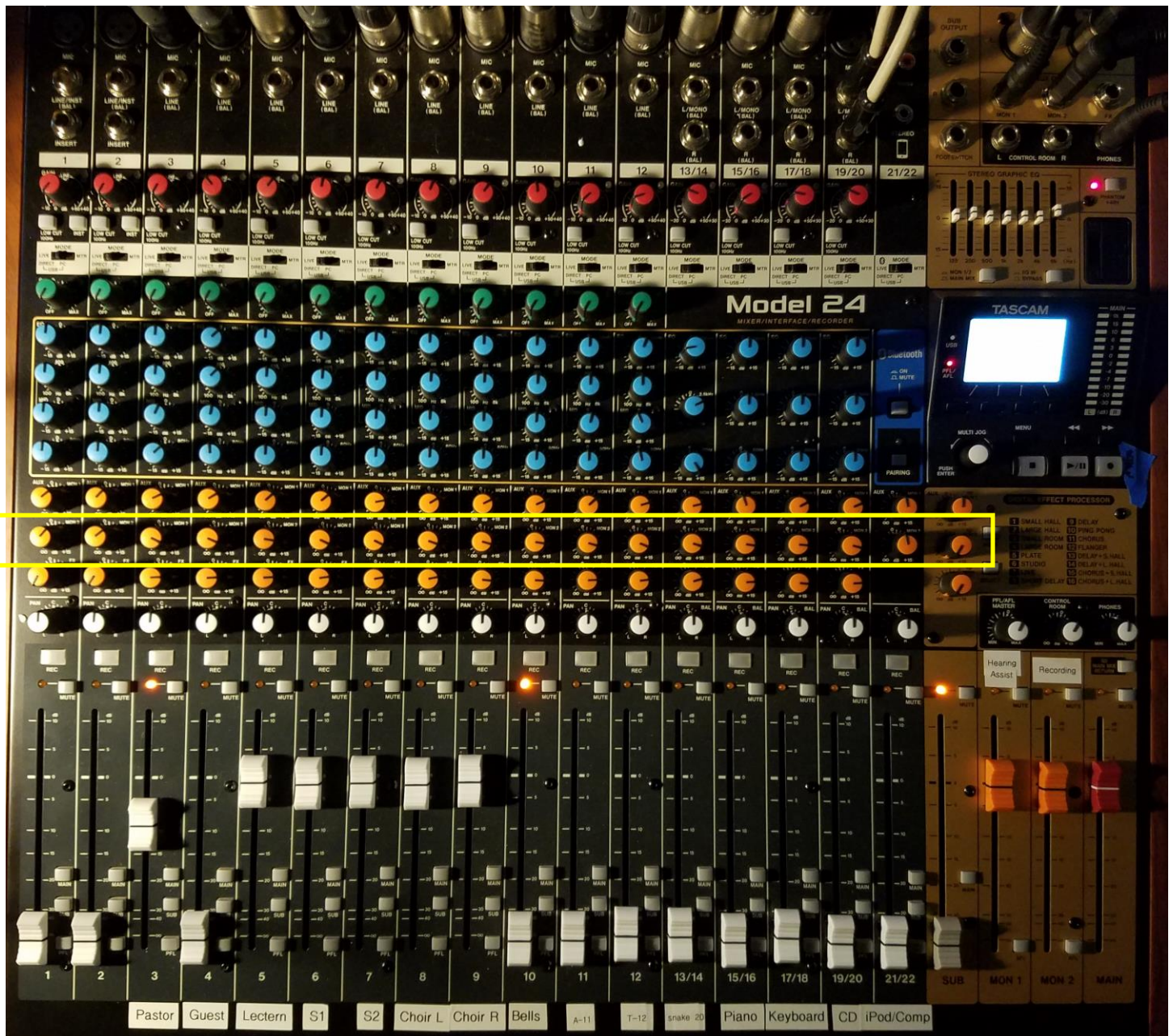
The numbers on the very bottom show the channel input numbers, and our board is also labeled with the input source. The lower right gold area contains the volume sliders. **MON 2 is for the Recording (this now is the main audio feed for Zoom)**, MON 1 is for Hearing Assist, and MAIN controls the main speaker volume. The orange sliders are monitors, and the red slider is for the main speakers. The red MAIN slider should be all the way down before the speakers and/or the board are turned ON or OFF. All of the other sliders should be left at their current positions. **The band of dials in the yellow box above are what control individual volumes for recording and Zoom audio.**

28. The Pastor's Countryman mic is labeled **Pastor**. **Guest** is on Channel 3 for another wireless lavalier mic (clips onto a lapel). **Lectern** is the wired mic at the liturgist podium. **S1** is wireless Stick 1 (sound booth drawer), and **S2** is wireless Stick 2 (up front). **Choir L** is the choir mic on the left (by the piano), and **Choir R** is on the right. **Bells** is a microphone up in the balcony for when the Bells play. The sliders should be adjusted as needed during the service (i.e., slide the Pastor volume down during hymns to blend with the congregation, but back up for prayers and the sermon).

Keep in mind that the slider levels for Main are what we hear through the speakers in the Sanctuary, but Monitor 2 (Recording) is the main sound level that the Zoom worshippers hear, with individual controls adjusted by the knobs in the yellow box on the previous page (see picture for number 27).

The vertical column for each channel has controls all the way from the top to the bottom of the board. The very top of the channel has input sources, which can be XLR (the round back plug with three pins) or a quarter inch jack (smaller round silver hole). We'll cover the middle knobs later on, but for now, let's move down to the white sliders, which are volume control for that channel, and then the three square buttons at the bottom (MAIN, SUB and PFL), that control where the output goes.

All channels in use should have MAIN and SUB pressed down.

At the top of each slider is a MUTE button. If the mute button is pressed, the red light next to it goes on, which indicates that regardless of where the volume slider is, output won't be sent. The MUTE button can be used if someone is moving the microphone stand around, or to eliminate potential feedback (e.g., someone is using Stick 2 next to the Choir Microphones). Pressing the MUTE button again un-mutes. **If you use the mute button, you have to pay close attention and unmute before the speaker / singer uses the microphone again.**

29. The next section of channels is used for the over-the-ear wireless headset mics, guitar, piano, keyboard, CD player, and iPod / Computer. A-11 and T-12 are the labels that match the over-the-ear wireless headsets (stored in the cases under the right side of the soundbooth). There is also a D-14 headset that is not used each week, but is used to pre-record audio. Channels 11, 12, and 13/14 can be used for a variety of inputs, depending on what is needed. Currently 11 and 12 are used for wireless vocal inputs, and 13/14 is used for guitar. Piano is on 15/16, the Electric Keyboard is on 17/18, CD player on 19/20, and a mini input for an iPod, iPad, smart phone, or the laptop computer is on 21/22.

30. Channel 13/14 is labeled Snake 20 because it's connected to the Snake cable (up front under the right side choir pew). In Snake 20, there is a quarter inch cable that can be used for guitar. The piano and choir mics are also run through the snake cable. The snake is really just a set of inputs and outputs that run from the stage to the soundboard.

31. The guitar box is a small amplifier that needs phantom power. If you're getting sound from a guitar, press the button for Phantom +48V (light will go on/off).

32. Near the top of the board there are red knobs that are labeled GAIN. The gain controls the sensitivity of the microphone/input. If someone is far away from the microphone, the gain needs to be higher to pick up the sound, but if it is too high it will feed back (e.g. screech). The Bell and Choir mics are set to a higher gain than the other mics. The gain is very sensitive, and should be the last thing adjusted to get good sound (typically you just need the sliders). The MODE switch underneath should always be LIVE.

33. The middle section of blue knobs is used to control Treble, Mid-Range, and Bass balance. You can use these to adjust the quality of the sound. If someone has a high, screechy voice, you might want to turn back the treble control, and push up the bass. The mid-range sounds have a tendency to feed back, so don't push those up past 0, or pull them back if you're getting feedback on a channel and you need more volume.

Recording

34. While this soundboard also has mixing and recording capability, we use a separate digital recorder to capture all the audio. This comes from MON 2 and goes into the Portable Audio Stereo Recorder. Turn it on by toggling the POWER button. **This recording needs to stay on all the way through the end of Worship for Zoom audio.**

35. After the recorder has booted up, push the REC button on the front of the unit. The light will go red when it is recording. Watch the recording level meter at the top of the display and keep it around the black line for the best undistorted sound quality (adjust MON 1 that goes to Recording). Note that the levels in the picture below are too high; they should stop a little over halfway. **Record the whole service from Prelude through Go Now in Peace to save what we need for the website with a sound editor.**
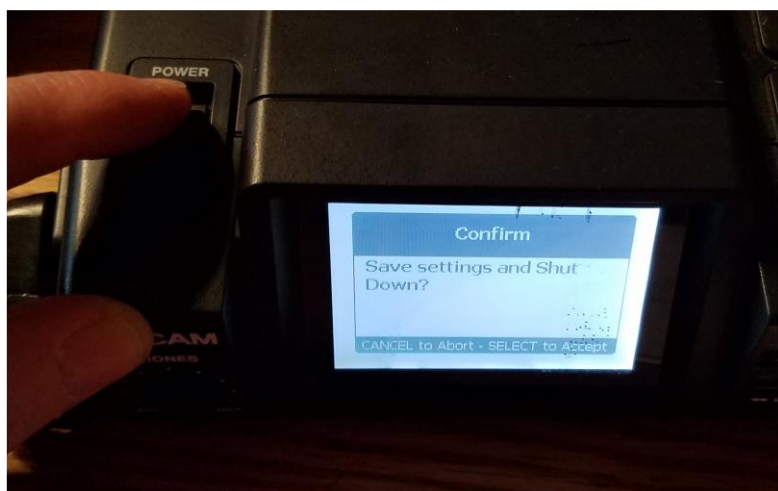

36. To end the recording, push the round STOP button on top.

37. The audio files save to a compact flash drive that plugs in the right side or the recorder. Just leave it there until Deb comes and takes it out to edit the file and put the audio on the website. We record the entire worship service. The recorder will make a new sequential data file with a time/date stamp each time you record and stop.

38. To shut down the recorder, toggle the POWER button again. You will be prompted on the screen to Confirm the shutdown. Push the Select button on top of the unit to Confirm the shutdown.

Troubleshooting

Problem	Possible Solutions
Zoom Users Can't Hear	1. When users go on Zoom, they have to join with audio, even if they are muted. 2. Check the lower left corner of the Silver Zoom screen for the microphone symbol. If there is a line through it, click on it to Unmute. 3. The recorder must be recording to hear. Check for the red record light, end click on the REC button if it's not recording.
Zoom Users Can't See the Powerpoint	1. The powerpoints should be running on Red Zoom. From the Zoom session, click on Share and choose the powerpoint show. 2. If you don't have Share, go on Silver Zoom and make Red Zoom the Co-Host. 3. What shows on the Silver Zoom computer screen is what the Zoom users see, not what shows on the Sanctuary screen.
Loud Screechy Feedback	1. If this happened when the Red Zoom session was started, you joined with audio. Close the Zoom session and rejoin WITHOUT AUDIO. 2. If a microphone is too close to another microphone, feedback can occur. Either mute one of the microphones, change the slider level, or turn down the gain on the microphones.

Problem	Possible Solutions
Audio Won't Play for Story	1. **If the mini jack IS NOT plugged into the front left headset jack on Red Zoom, you should hear the audio coming out of the computer speaker.** 2. **If the mini jack IS plugged into the front left headset jack on Red Zoom, the audio goes in through the soundboard to the main speakers (and Zoom).** 3. **Sometimes if a Windows update is waiting to happen, some functions are disabled, including playback. The sound should be tested when the powerpoints are loaded so that there is time for an update if needed.**
Other Audio / Microphone Issues	1. **The internal audio settings on Silver Zoom are set to disable the microphone, but enable HDMI input and output. This makes sure that all of the sound goes to the video mixer, soundboard and recorder.** 2. **The internal audio settings on Red Zoom are set to disable audio output to the HDMI, and use just the speakers. This ensures that the audio from powerpoints or CDs goes into the video mixer, soundboard, and recorder.**